Appendix D
Advanced Multi-Service Pilot Training at NAS Corpus Christi, TX
using T-44A/C devices.

1.0 GENERAL.

1.1 Training Site. Appendix D specifies the requirements for the T-44A/C Advanced Multi-Service Pilot Training System at NAS Corpus Christi, TX. T-44A/C training will be provided to U.S. military personnel, foreign military personnel, Government personnel, and Instructor Pilots as required.

1.2 Training devices to be utilized for instruction are:

1.2.1 Device 2F129 T-44A Instrument Flight Trainer (IFT) – The 2F129 is a T-44A cockpit on a 3-Degree of Freedom (DOF) motion platform. The 2F129 is used to train student pilots with the operation and flight procedures involved in the T-44A aircraft. The device consists of Pilot and Copilot stations, an Instructor Operator Station (IOS), hydraulic power supply, main power box, and a digital computer. The Pilot and Copilot stations contain simulated instruments and controls. The controls provide force feedback, thereby giving a true sense of flight. Behind the Pilot and Copilot station is the IOS. The IOS is used to control the students' flight lessons.

1.2.2 Device 2F129C T-44C IFT - The 2F129C is a T-44C glass-cockpit OFT on a 3-DOF motion platform. The 2F129C is used to train student pilots with the operation and flight procedures involved in the T-44C aircraft. The device consists of Pilot and Copilot stations, an Instructor Operator Station (IOS), hydraulic power supply, main power box, and a digital computer. The Pilot and Copilot stations contain simulated glass-cockpit instruments and controls. The controls provide force feedback, thereby giving a true sense of flight. Behind the Pilot and Copilot station is the IOS. The IOS is used to control the students' flight lessons. There are significant differences between the 2F129 and the 2F129C both in systems and in the format of instruction. Instructors assigned to train students in the 2F129C OFT will require full knowledge of the system's functionality and operational flight procedures of each of the specific glass-cockpit flight components. A separate qualification and designation is required to operate and instruct in this device because of the significant differences in the operation of the device and its components along with a major change in aircrew resource training philosophy driven by the glass-cockpit equipment.

1.2.3 Device Table.

Device Number	Device Type	# of Devices	Standard Mission Length	Brief/Debrief Times (hrs)	Instructor to student ratio
2F129	OFT	2	1.5	0.5/0.67	1/1
2F129C	OFT	2	1.5	0.5/0.67	1/1

NOTE: The T-44 aircraft is in the middle of a major modification to a glass-cockpit conversion as well as a Service Life Extension Program (SLEP). Eventually all OFT devices supporting the T-44A will be converted to T-44C configuration. At that point, all Contractor Instructor Services (CIS) contractors instructing in this device will be required to be fully qualified.

CIS contractor may be required to allot an extra thirty (30) minutes for briefing on a dissimilar event.

1.3 Government Furnished lecture Classrooms.

1.3.1 Typical Classroom Instructional Objectives. The objective of the classroom ground training is to provide the student with sufficient training to enable performance of the flight and emergency procedures that are taught/conducted in the follow-on stages of simulator flight training.

1.4 Types of Classrooms. There are three types of classrooms located at TRAWING 4. These classrooms are as follows: Advanced Electronic Classrooms (AECs), Mediated Interactive Lecture (MIL) classrooms, and Learning Resource Centers (LRCs). Classrooms are scheduled and assigned on a weekly basis by the Wing Training Department based on class size and media required.

1.4.1 Advanced Electronic Classrooms (AEC). An AEC contains a podium connected to an overhead projector so the instructor can perform the lesson(s). The podium is equipped with software that allows the instructor to interact directly with each student independently, in groups, or as an entire class. An AEC can function as an LRC when the classroom is not being utilized for lectures or otherwise occupied. There are five general use AEC configured classrooms and two special use AEC configured classrooms.

Bldg #	Room #	Student Capacity	Equipment	Availability (M-F)
1824	202 & 204	27	AEC	0700-1700
1824	114, 203 & 205	18	AEC	0700-1700
1824	118 & 119	9	AEC Special Purpose JMPS/PFPS	0700-1700

1.4.2 Mediated Interactive Lecture (MIL). A MIL classroom contains a podium connected to an overhead projector. The name for this type of classroom is an Electronic Classroom (EC). This classroom does not utilize computers at each student station and is used for mediated interactive lectures or lectures without electronic interface. TRAWING 4’s MIL classrooms are available for students to use as quiet study areas when they are not otherwise in use. There are ten MIL configured classrooms.

Bldg #	Room #	Student Capacity	Equipment	Availability
1824	115, 207, 208, 213, 217 & 218	9-24	MIL	0600-2200 (M-S)
1824	214 & 216	18	Special Purpose MIL T-34 & T-6 SYS (Only)	0600-2200 (M-S)
83	119 & 120	20	MIL	0600-2200 (M-S)

Learning Resource Centers (LRCs). LRCs are classrooms containing individual student stations where TRAWING 4 students and instructors access curriculum Computer Aided Instruction (CAI) lessons. These lessons are accessible to the

student through Interactive Courseware (ICW). Instructor supervision within the LRC includes provision of answers to student's technical questions concerning their assigned lessons and assisting the students when technical problems arise within the student management system. The student management system launches the courseware and tracks the student's progress in an automated system known as Training Integration Management System (TIMS).

Bldg #	Room #	Student Stations	Equipment & Capability	Device Availability
1824	217	13	CAI units	0700 – 2200 (M-Sun)

NOTE: All classroom computers and LRC computers are connected and are part of Training Integration Management System (TIMS). CIS personnel functioning as classroom instructors and LRC monitors must be knowledgeable in the functionality of this system and be able to solve minor issues or direct students to the appropriate individual to resolve problems he or she may encounter.

1.4.3 Typical ICW/CAI Classroom Instruction. When the students arrive, the instructor shall verify the individuals present are actually identified in the Government electronic student management system (TIMS) as participants. Any student not listed on the electronic roster shall be entered at that time. Students listed but not present shall be reported to the GTO or his designee when noted. The student roster, CNATRA TIMS General Roster, shall be used to record both attendance and lesson/course completion. The instructor shall use the Government approved lesson plan and Instructor Guide to teach the course. Each instructor qualified to instruct this course shall have his/her own Instructor Guide. The Instructor Guide may be personalized as desired by making notes in the instructor activity column. The instructor shall conclude the lesson(s) with a quiz as appropriate to check for student understanding. At the end of each day's instruction, the instructor shall answer students' questions to clarify any portion of the instruction that is not clear and ensure that each student was properly completed in TIMS for course modules completed that day. At the end of the course, the instructor shall administer an electronic on-line or Paper end–of-course examination as appropriate for the subject matter being examined. The instructor must insure that all grades are properly entered in TIMS and report course completion to the Wing Training office administrative assistant. The instructor shall use a copy of the TIMS General Roster as a backup record for the course final grades. The Instructor shall ensure student course critique sheets or on-line critiques are completed and forwarded to the Wing GTO.

1.5 Curriculum. The following CNATRA instructions are required for T-44A/C training at NAS Corpus Christi:

a. 1542.153(Series) Multi-Engine Flight Instructor and Transition Curriculum
b. 1542.147(Series) Advanced Multi-Service Pilot Training System Curriculum

1.6 CIS Schedule / Primary Responsibility Parameters.
Note: For the Corpus Christi site, one stepladder (a single task under a single CLIN) will be used for the two curricula described in Appendices C (Primary) and D (Advanced). This shared HPW "pool" supports the flexibility required for efficient Pilot training throughput. Using the 1410 HPW stepladder (HPW Table below showing 1055/355 HPW splits between curricula), the sharing will work as described, treated on a weekly basis only and using whole hours only (round up):

a. Case 1, maximum Primary HPW: Primary curriculum (App. C) can schedule its HPW split of 1055 hours plus can add – for the week – up to 20% of the other curriculum (from Advanced (App. D) 355x20%=71 hours for a maximum of (1055+71=) 1126 hours for that week, leaving Advanced at (355-71=) 284. These adjusted HPW splits (1126/284) are treated as the authorized HPW for that week on the two appendices (scheduled work) and daily maximum scheduling rules apply.

b. Case 2, minimum Primary HPW: 1055 minus – for the week – up to 20% of the other curriculum (71 hours) for a minimum HPW split of 984, leaving Advanced at 426.

These 2 cases define the boundaries: For the 1410 HPW stepladder, Primary (App. C) can have any weekly HPW between 984 and 1126, Advanced (App. D) between 284 and 426. The weekly sum must add to 1410.

Premium Time offset – Weekly Premium Time (PT) computations shall be made against the non-adjusted split HPW, e.g. max Primary (App. C) use of PT would be 1055 HPW x 20% = 211 PT hours. Any adjusted increase (as above) to the HPW split will count against the PT request the government may make for that week, i.e. if the government schedules as case 1, above, the 71 hours added to Primary (App. C) are subtracted from the allowable 20% PT for that week. 211 possible PT hours – 71 added hours from the "pool" = 140 PT hours allowed that week. The case 1 split PT for Advanced (App. D) would be unaffected (71 PT hours), but the government, at this time, can conceive of no scenario where it would shift weekly HPW out of a curriculum but then add PT. As always, the contractor can agree to provide PT at levels above what is required, if able.

Hourly Stepladder per Week*	HPW Splits	Min/Max HPW	Device Availability	Window of CI Operations **
1630	Primary: 1275 Advanced: 355	Primary: 1204/1346 Advanced: 284/426	0600-2400 M-F (18 hrs)	0530-0030 M-F (19 hrs)
1560	Primary: 1160 Advanced: 400	Primary: 1080/1240 Advanced: 320/480	0600-2400 M-F (18 hrs)	0530-0030 M-F (19 hrs)
1515	Primary: 1160 Advanced: 355	Primary: 1089/1231 Advanced: 284/426	0600-2400 M-F (18 hrs)	0530-0030 M-F (19 hrs)
1465	Primary: 1160 Advanced: 305	Primary: 1099/1221 Advanced: 244/366	0600-2400 M-F (18 hrs)	0530-0030 M-F (19 hrs)
1410	Primary: 1055 Advanced: 355	Primary: 984/1126 Advanced: 284/426	0600-2400 M-F (18 hrs)	0530-0030 M-F (19 hrs)
1360	Primary: 1055 Advanced: 305	Primary: 994/1116 Advanced: 244/366	0600-2400 M-F (18 hrs)	0530-0030 M-F (19 hrs)
1160	Primary: 1160 Advanced: 0	N/A	0600-2400 M-F (18 hrs)	0530-0030 M-F (19 hrs)

* Hours of instruction per day will be an even distribution of weekly hours above to a five-day work week within the HPW split (either non-adjusted or adjusted), with up to 10% variation required. For example, if 500 is the instructional hours per week contracted for in the Primary/Intermediate (Appendix H) curriculum, the average hours per day would be 100. Given the maximum amount of variation allowed, the contractor may be required to instruct up to 110 hours on a given day in that curriculum (with anything over 110 being premium time). Also, a total of 500 hours cannot be exceeded for the week without use of premium time. In the event additional instruction hours are needed in excess of the exercised stepladder, the Government will utilize premium time.

** Window of CI Operations may be adjusted per Addendum B, paragraph 5.4. The Window of CI Operations may change during the course of the task order.

1.7 Government provided contractor administrative spaces. The following are offices provided by the Government for the contractor's use:

BLDG 83
CIS Scheduling Office Room 106
CIS Site Manager's Office Room 105
CIS STAN Officer's Office Room 109
CIS Instructor Lounge Office Room 111

BLDG 1824
CIS Scheduling Office Room 110
CIS Site Manager's Office Room 212
CIS STAN officer's(2)office Room 208
CIS Instructor Lounge Room 213A

2.0 INSTRUCTOR QUALIFICATIONS AND CERTIFICATIONS.

2.1 Qualifications. T-44A/C Contract Instructor (CI) Qualifications:

a. Has been a designated military pilot in any aircraft.
b. A CI shall have a minimum of one tour in flight status, a minimum of one thousand (1000) flying hours, and a bachelors degree; OR a civilian pilot with an FAA multi engine instrument instructor or ATP rating and a minimum of 3,000 hrs in part 135 or part 121 operations and a bachelors degree.
c. No more than 25% of CIs can have only civilian flight experience.
d. The contractor may request waivers from the Government regarding any of the above qualifications for an individual on a case by case basis. The COR through coordination with the GTO will decide whether to approve or disapprove such a request.

2.2 Certifications. A CIP must successfully complete the T-44A/C NATOPS open book, closed book, and boldface exams. A CIP must understand the T-44 mission, crew procedures, tactics, curriculum change forms, and all Navy generated training publications.

To qualify as a classroom instructor, the Contract Instructor Under Training (IUT) must monitor one full course. The Contract IUT must then instruct two (2) full courses while being monitored by a qualified CIS Ground School instructor for that curriculum. The contractor will coordinate with the GTO if the Contract Instructor Under Training wants to monitor an additional course before instructing the two full courses in order to be certified. The instructor will then be monitored by a representative of the Government qualified and designated to sign the instructor off as qualified. The Government representative can be a Wing STAN officer or the Wing Instructional Systems Specialist.

3.0 Training.

3.1 Initial Training. The Government will provide the following training as necessary and applicable: Training may be provided in the following areas:

a. Standard Operating Procedures (SOPs);
b. Course Rules;
c. NATOPS;
d. Aircraft Systems;
e. Syllabus Standardization;
f. Grading Criteria;
g. Basic Simulator Operating Procedures (SOPs);
h. Flight Instructor Training Course (FITC) ;
i. Crew Resource Management Course.

3.2 Annual Training requirements/Standardization Checks. The contractor is responsible for maintaining currency of qualifications in accordance with (IAW) paragraph 4.6 of Addendum B (PWS).

4.0 REQUIREMENTS.

4.1 Instruct all simulator events listed in the guides. The contractor shall be responsible for teaching all sim-events stated in each Advanced Multi-Engine MPTS Master Curriculum Guide (MCG) above.

* There are two models of sims for advanced training in the T-44A/C aircraft at TRAWING 4. The two T-44A/C sims replicate two very different aircraft cockpit configurations and require different skill sets to instruct the students as well as operate the device. These devices require specific instructor designations, T-44A OR T-44C qualified. Contract Instructors may be qualified in either or both devices.

4.2 Instruct the following classroom events broken out by MCG. The contractor shall be responsible for teaching classroom lecture events:

T-44A/C MCG Events	Average Students Per Class	Duration of Each Class (HRS)	Frequency
SYSTEMS	18-25	28.0	*1 per week
INSTRUMENT FLIGHT RULES**	18-25	69.5	*1 per week
AERODYNAMICS**	18-25	24.5	*1 per week
VISUAL NAVIGATION**	18-25	19.0	*1 per week
Joint Mission Planning System**	18-25	12.0	*1 per week
Other Events	Average Students Per Class	Duration of Each Class (HRS)	Frequency
FLIGHT INSTRUCTOR TRAINING COURSE (FITC)	10	24.0	1 per month
ANNUAL INSTRUMENT REFRESHER	20	4.0	2 per month

* These courses are taught weekly or bi-weekly depending on the course to an average of eighteen (18-25) students.

**Also taught for TC-12 students.

NOTE: Contract instructors may be assigned to instruct additional courses as identified by the Wing, approved by CNATRA N7 and accepted by the contractor.

4.3 Provide Instructor(s) for the LRC, as required, during the normal operating hours for scheduled events only, listed in paragraph 1.4.1. It is the contractor's responsibility to be available to answer questions and to assist the students should they have problems with the content of the ICW, the functionality of the lessons, or the student management system. All curriculums are supported in the each LRC. Students are allowed to come and go freely from the LRC and to complete their assigned ICW courseware at their own pace.

4.4 Student Training Material:

a. All Instructor Lecture guides	available at CCC or Training Office
b. NATOPS/PCL	available at Book Issue
c. TW-4 In Flight guides	available at Book Issue
d. TW-4 SOP	available at Book Issue
e. All Flight Training Instructions (FTIs) and Student Workbooks	available at Book Issue

Note: The CI is responsible for ensuring that the content of instruction he provides is appropriate to all current and implemented instructional materials and CNATRA Instructions/Notices. All instructional material is distributed from the wing via the training department. The Wing STAN division normally will be tasked with making sure the contractor has received the latest training materials prior to their implementation.

4.5 CIS Platform Specific Primary Responsibilities. Refer to Addendum B, paragraph 4.1.1.

4.6 CIS Platform Specific Additional Support Responsibilities. All of Addendum B paragraph 4.1.3. applies.

4.7 CIS Platform Specific Collateral Responsibilities. Refer to Addendum B, paragraph 4.1.4.

4.8 CIS Scheduling – Technical/Training Data. All early Ground School lectures are scheduled by the Wing Ground Training Officer (GTO), or his designee, and sent to the contractor's scheduling desk. The Wing Ground Training Officer is responsible to oversee both the weekly proposed schedule and the daily CIS tasking by the squadrons under the wing for Simulators and post Ground School Lectures. Wing GTO or designee also assigns or approves classroom spaces for all pre- and post-Ground School lectures taught by the contractor and conducted in the schoolhouse. Class dates are tentatively determined six months in advance, however minor changes may occur. Ground School calendars are sent out 4-5 days before the beginning of a new class. The duration of Ground School is normally four weeks which include the CPT simulator events. Squadrons submit proposed weekly simulator and ground school course requirements taught by CIS contract personnel to the Wing GTO who in turn reviews them. If the schedule exceeds the stepladder hours within this contract, the GTO via the COR will seek funding in the form of Premium Time from CNATRA. The Wing GTO will only intervene on the squadron's daily simulator schedule if there is an unforeseen issue with available funding or if the squadron's scheduling policy is in conflict with the CIS or the COMS contract limitations, MCG or Wing SOP. Simulators events are hard scheduled the day prior to the event.

5.0 CIS Scheduling Authority. The squadron's designated officer(s) who is appointed by the squadron's Commanding Officer and has the authority to develop and approve the schedule (ground/ simulator/flights).